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Claims

1. A ventricle drain comprising:

5 sealing means for providing a sealed passage through an aperture in a cranial bone, and  
a catheter having a free end and an end adapted for insertion into the aperture through  
the sealed passage for draining bodily fluids,

wherein the sealing means comprises

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- a fixture with a conduit defining a passage through the fixture, the fixture being  
provided with fastening means for attachment of the fixture to the aperture,
- a seal for sealed engagement with the catheter and the fixture, and
- a fastener for securing the catheter to the fixture.

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2. A ventricle drain according to claim 1, wherein the cross sectional shape of at least a  
part of the fixture is circular and wherein the fastening means of the fixture comprises  
threads for establishment of a screw joint between the aperture and the fixture by axial  
rotation of the fixture.

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3. A ventricle drain according to claim 1 or 2, wherein the passage through the fixture is  
provided with two end parts and an intermediate part and wherein:

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- the two end parts are provided with a first and a second radial size, and
- the intermediate part of the passage is provided with a third radial size,

and wherein the third radial size is smaller than the first and the second radial sizes.

4. A ventricle drain according to claim 3, wherein the passage through the fixture is

30 constricted by the two end parts being provided with decreasing radial sizes towards the  
intermediate part of the passage.

5. A ventricle drain according to any of the preceding claims, wherein the fastening means  
of the fastener comprises threads for establishment of a screw joint between the fastener

35 and the fixture by axial rotation of the fastener.

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6. A ventricle drain according to any of the preceding claims, wherein the seal is adapted to have at least a first and a second shape corresponding to a first and a second position of the fastener in relation to the seal, and wherein at least the first position provides a  
5 sealed engagement between the seal and the catheter.

7. A ventricle drain according to any of the preceding claims, wherein the catheter is reinforced against radial pressure at least in a part of its length.

8. A ventricle drain according to any of the preceding claims, wherein the catheter is reinforced by means of a body inserted into the catheter.

9. A ventricle drain according to any of the preceding claims, further comprising a valve having a first port attached to the free end of the catheter, a second port attached to a  
15 place of disposal of the bodily fluids and a third port, said valve having means for selectively connecting one of either the second port or the third port to the first port.

10. A ventricle drain according to claim 9, wherein the third port is adapted for insertion of guiding means for guiding the catheter through the aperture.

11. A ventricle drain according to claim 9 or 10, further comprising a one-way valve between the second port and the place of disposal so as to avoid the bodily fluids to flow from the place of disposal to the catheter.

12. A ventricle drain according to any of claims 9-11, wherein the third port is adapted for injection of fluids into the free end of the catheter.

13. A ventricle drain according to any of claims 9-11, wherein the valve further comprises a fourth port with a soft rubber seal adapted for injection of fluids into the free end of the  
30 catheter.

14. A catheter for a ventricle drain according to any of the preceding claims, wherein the catheter has an intermediate part and two end parts, the intermediate part of the catheter being made from a different material than the end parts, so that the intermediate part of  
35 the catheter is more resistant towards radial pressure than the end parts.

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15. A seal for a ventricle drain according to any of the preceding claims, wherein the seal deforms elastically in a radial direction so as to press against the catheter upon application of a pressure to the seal.

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16. A seal for a ventricle drain according to any of the preceding claims, wherein the seal has a first and a second part the first part of the seal being provided with a resilient part enabling the first part to deform elastically in a radial direction so as to press against the catheter upon application of an axial pressure to the seal.

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17. A method for passing a catheter through an aperture in the cranial bone, said method comprising the steps of:

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- attaching a fixture provided with a conduit to the cranial bone,
  - inserting the catheter into the brain through the conduit, and
  - fixating the catheter between the fixture and a seal,

said seal being compressed into sealing engagement with the catheter and the fixture by a fastener attached to the fixture.

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